

Date: Tuesday, 20/01/2009 2:31:40 PM
 User: Linda Lacelle

Process Sheet

Customer : CU-DAR001 Dart Helicopters Services
 Job Number : 44949 -1
 Estimate Number : 13733
 P.O. Number :
 This Issue : 20/01/2009 S.O. No. :
 Prsht Rev. : NC
 First Issue : // Type : SMALL /MED FAB
 Previous Run :
 Written By :
 Checked & Approved By :
 Comment : Est Rev:A 09-01-19 as per prelim issue DD verified by:

Drawing Name : HARDPOINT KIT INSTALL
 Part Number : D412786011
 Drawing Number : D412-786-1 PRELIM
 Project Number : N/A
 Drawing Revision : PRELIM
 Material :
 Due Date : 26/01/2009 Qty: 4 Um: Each

POSITIVE RECALL
 spk 11

Additional Product

PRELIMINARY ISSUE

Job Number:



Seq. #: Machine Or Operation: Description :

1.0 DC DOCUMENT CONTROL



J20 09-01-29



Comment: DOCUMENT CONTROL

Photocopy bluefile & type labels per PPP D412-786-011 CHG001

2.0 PACKAGING 1 PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Pick Packing Kit

3.0 D412786013 Hardpoint, Fwd



Comment: Qty.: 1.0000 Each(s)/Unit Total: 4.0000 Each(s)

Hardpoint, Fwd

44964

4.0 D412786015 Tailboom Mount



Comment: Qty.: 1.0000 Each(s)/Unit Total: 4.0000 Each(s)

Tailboom Mount

44965

5.0 QC4 INSPECT 100% KITS FOR COMPLETENESS



Comment: INSPECT 100% KITS FOR COMPLETENESS

09-01-29 INSPECTING 1

6.0 PACKAGING 1 PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and pack for shipping as per PPP D412-786-011

Location:

PPP Rev:

Draft

11-29

(1-)

34

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Tuesday, 20/01/2009 2:31:40 PM
User: Linda Lacey

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: HARDPOINT KIT INSTALL

Job Number: 44949

Part Number: D412786011

Job Number:



Seq. #:

Machine Or Operation:

Description :

7.0

QC21

FINAL INSPECTION/W/O RELEASE



09/01/29 *[Signature]*

Comment: FINAL INSPECTION/W/O RELEASE

Job Completion



MF 09-01-28

POSITIVE RECALL
EFFECTIVE *09-01-29* AUTH *u*
RELEASED *09-01-29* DATE *u*
MP 09/01/29

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

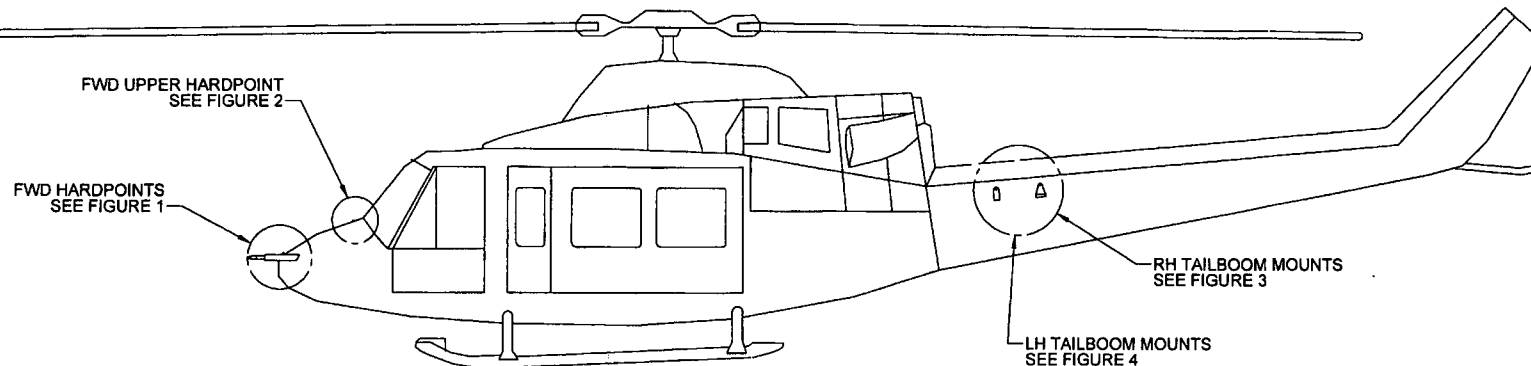
Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

U.S. DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION			DATE
STATEMENT OF COMPLIANCE WITH THE FEDERAL AVIATION REGULATIONS			January 19, 2009
AIRCRAFT OR AIRCRAFT COMPONENT IDENTIFICATION			
MAKE	MODEL NO.	TYPE (Airplane, Radio, Helicopter, etc.)	NAME OF APPLICANT
Bell	412, 412EP	Helicopter	Dart Aerospace USA, Inc.
LIST OF DATA			
IDENTIFICATION	TITLE		
MDL-D412-786 Revision A Dated January 14, 2009	Dart Aerospace Ltd., Master Document List		
QR-D412-786-1 Revision A Dated January 16, 2009	Dart Aerospace Ltd., Qualification Report, "Installation of D412-786-011 Hardpoint Kit on Bell 412/412EP Helicopters"		
<p>This approval is for engineering design data only. It indicates the data listed above demonstrates compliance only with the regulations specified by paragraph and subparagraph listed below as "APPLICABLE REQUIREMENTS." This form does not constitute FAA approval of all the engineering design data necessary for substantiation of compliance to necessary requirements for the entire alteration/repair. This approval supports a 337 approval and is for the following aircraft:</p> <p>S/N 36388, N813FK S/N 36390, N985MB S/N 36448, N371EF S/N 36493, N959TL</p>			
PURPOSE OF DATA			
Structural approval of blade folding kit hard point provisions.			
APPLICABLE REQUIREMENTS (List specific sections)			
CFR 14 Part 29.301, 29.303, 29.305, 29.307(a), 29.571, 29.601, 29.603, 29.605, 29.607, 29.609, 29.611, 29.613, 29.619, 29.625			
CERTIFICATION - Under the authority vested by direction of the Administrator and in accordance with conditions and limitations of appointment under Part 183 of the Federal Aviation Regulations, data listed above and on attached sheets numbered _____ have been examined in accordance with established procedures and found to comply with applicable requirements of the Federal Aviation Regulations.			
I (We) Therefore <input type="checkbox"/> Recommend approval of these data <input checked="" type="checkbox"/> Approve these data			
SIGNATURE(S) OF DESIGNATED ENGINEERING		DESIGNATION	CLASSIFICATION(S)
Dave McClenahan <i>DH McClenahan</i>		DERT-635407-NM	Structures



D412-786-011 HARDPOINT KIT

QTY -011	QTY -013	QTY -015	PART NUMBER	DESCRIPTION
X			D412-786-011	HARDPOINT KIT
1	X		D412-786-013	FWD HARDPOINT KIT
1		X	D412-786-015	TAILBOOM MOUNT KIT
		1	D3866-041	TAILBOOM MOUNT
		2	D3866-043	TAILBOOM MOUNT
	1		D3870-041	FWD LH HARDPOINT
	1		D3870-042	FWD RH HARDPOINT
	1		D3870-5	FWD UPPER HARDPOINT
	1		D3871-1	DOUBLER
	1		D3871-2	DOUBLER
	10	12	MS21042L3	NUT
	8	12	MS27039-1-11	SCREW
	1		MS27039-1-12	SCREW
	1		MS27039-1-14	SCREW
	10	24	NAS1149D0332J	WASHER

INSTALLATION	WEIGHT	LONGITUDINAL		LATERAL	
		ARM	MOMENT	ARM	MOMENT
D412-786-011 HARDPOINT KIT	0.58 LBS 0.22 KG	164.67 IN 4.18 M	95.51 IN 0.92 KG-M	-1.25 IN -0.03 M	-0.73 IN-LB -0.007 KG-M
D412-786-013 FWD HARDPOINT KIT	0.22 LBS 0.08 KG	-13.55 IN -0.34 M	-2.98 IN-LB 0.03 KG-M	2.36 IN 0.06 M	0.52 IN-LB 0.005 KG-M
D412-786-015 TAILBOOM MOUNT KIT	0.36 LBS 0.13 KG	273.58 IN 6.95 M	98.49 IN-LB 0.90 KG-M	-3.47 IN -0.09 M	-1.25 IN-LB -0.01 KG-M

RELEASED
09/01/14

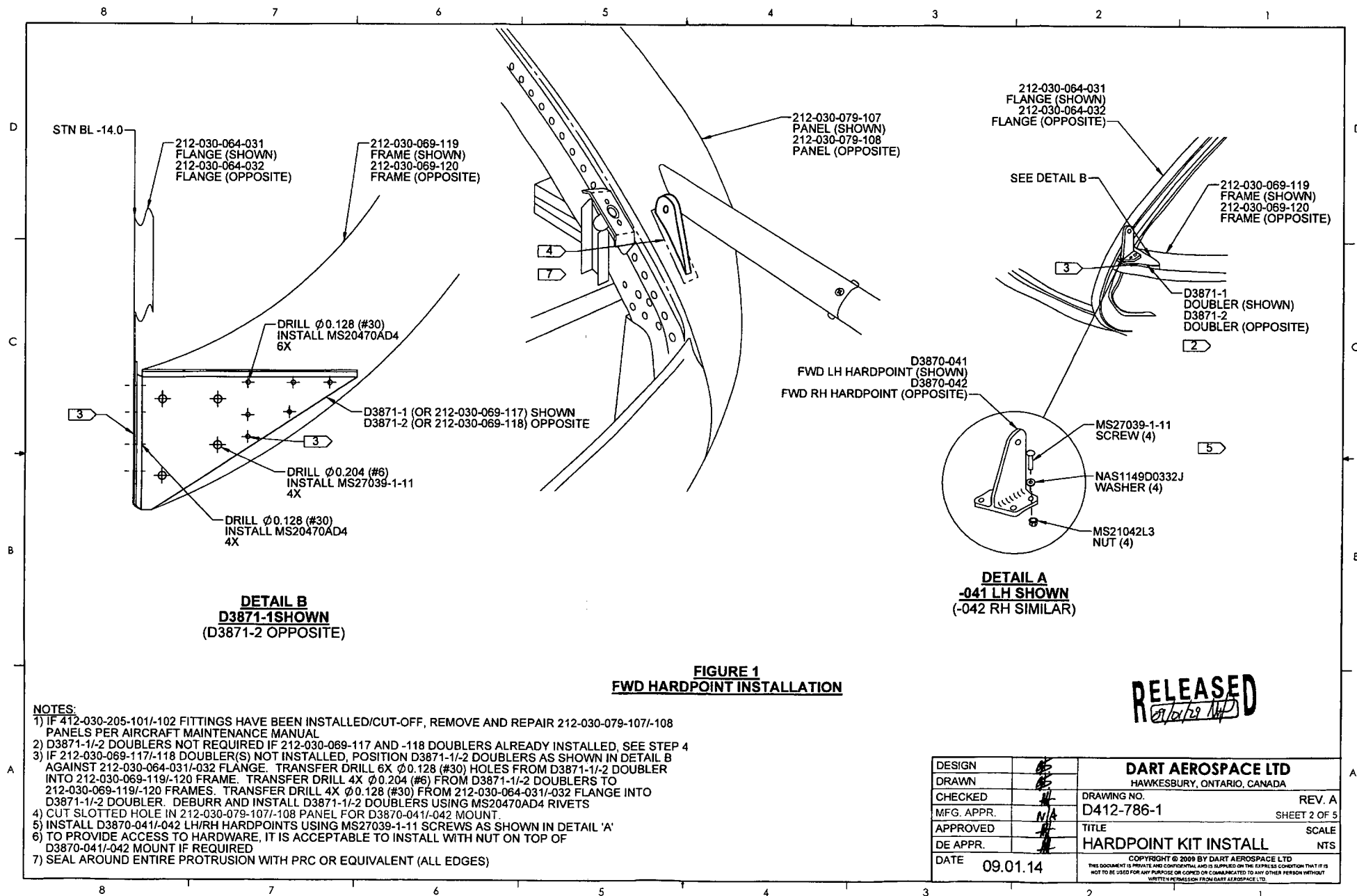
- NOTES:**
- 1) D412-786-011 HARDPOINT KIT REQUIRED ON 412/412EP AIRCRAFT UTILIZING D412-695-011 BLADE FOLDING KIT WHERE WIRE STRIKE COMPATABILITY IS REQUIRED
 - 2) TOUCH UP DRILLED HOLES WITH ALODINE PER THE AIRCRAFT MAINTENANCE MANUAL
 - 3) TORQUE FASTENERS AS FOLLOWS: 10-32; 20-25 IN-LBS
 - 4) PRIME AND PAINT HARDPOINTS TO MATCH AIRCRAFT PAINT SCHEME PER AIRCRAFT MAINTENANCE MANUAL

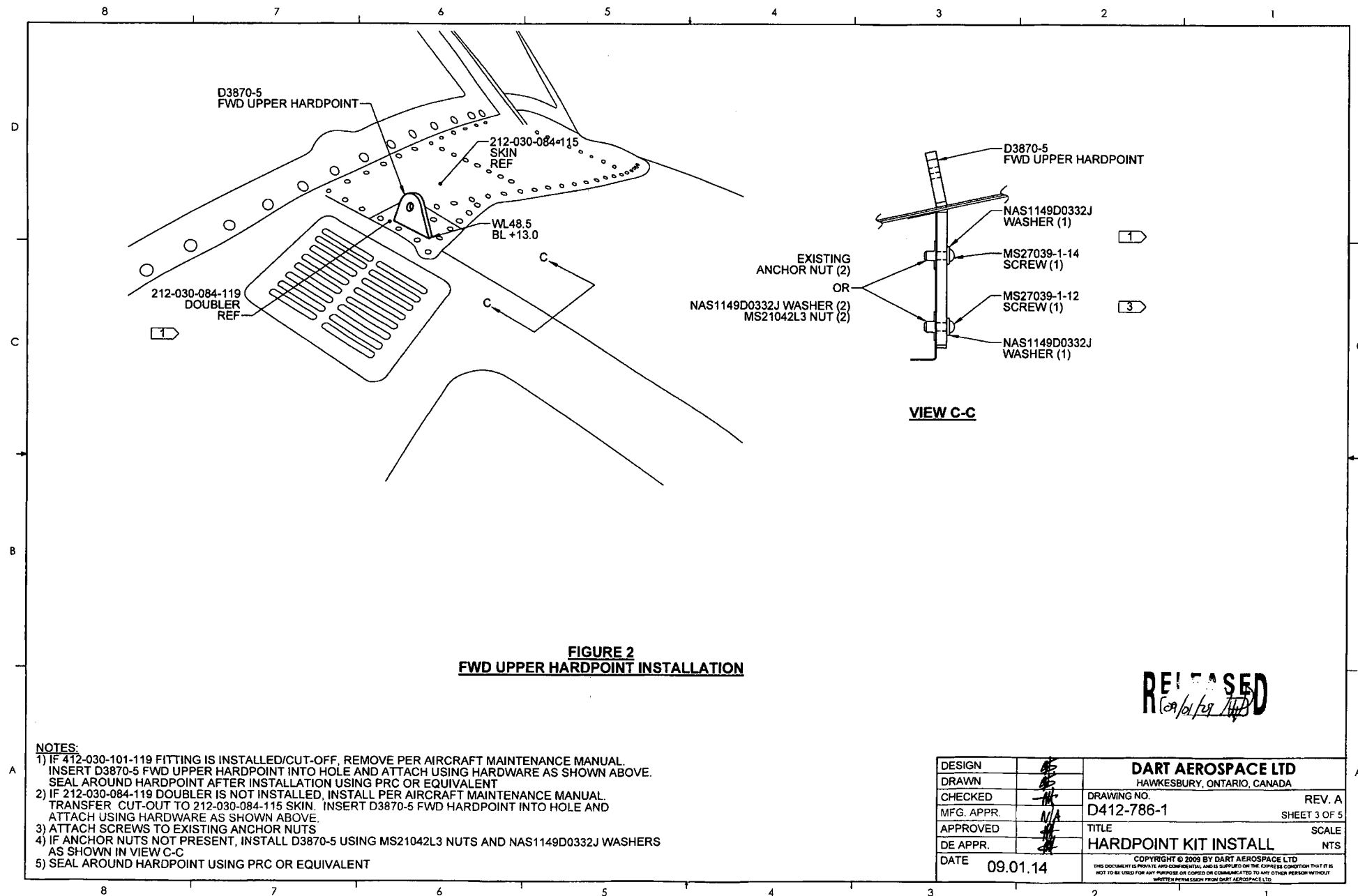
A	NEW ISSUE	BY	09.01.14
REV	DESCRIPTION	DATE	
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CHECKED			
MFG. APPR.			
APPROVED			
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DATE	09.01.14		

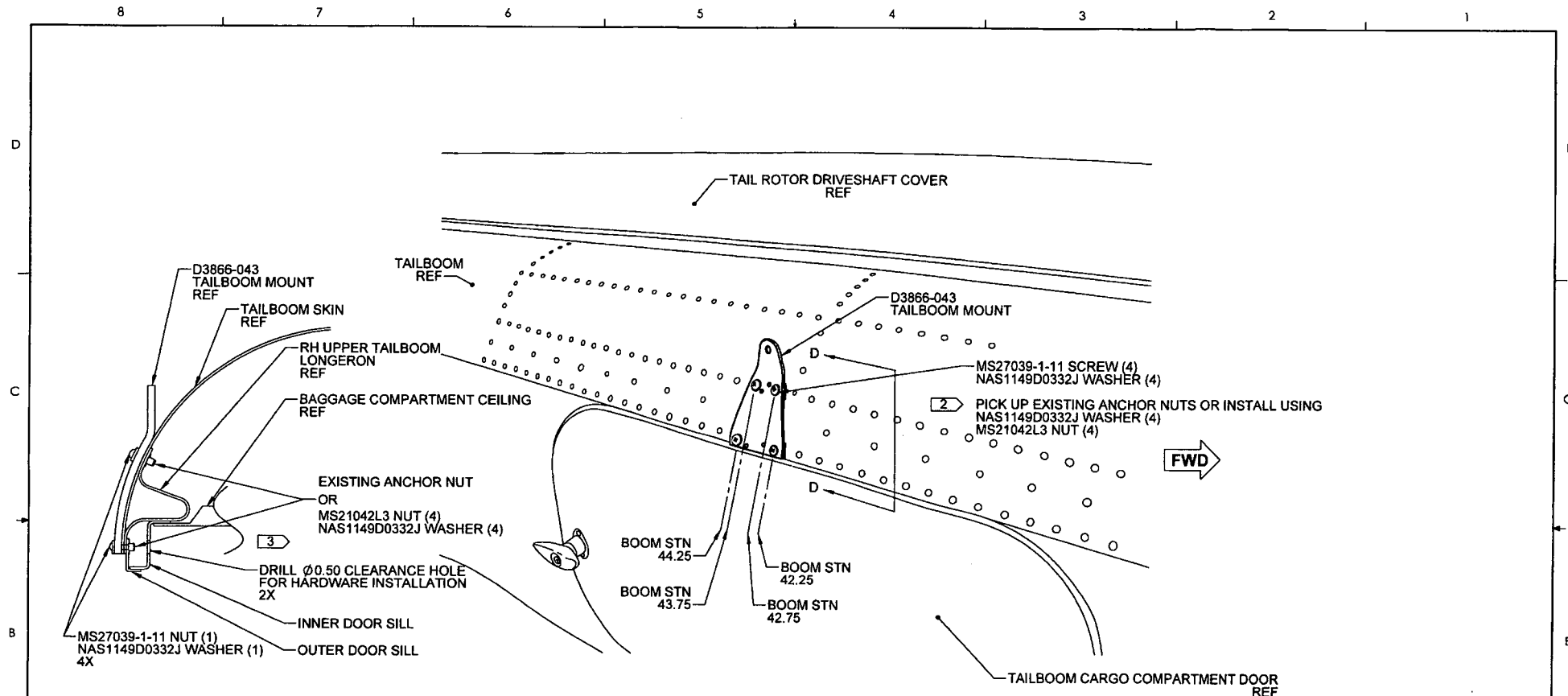
DART AEROSPACE LTD
HAWKESBURY, ONTARIO, CANADA

DRAWING NO. REV. A
D412-786-1 SHEET 1 OF 5
TITLE SCALE
HARDPOINT KIT INSTALL NTS

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VIEW D-D

**FIGURE 3
LH TAILBOOM MOUNT INSTALLATION**

RELEASED
2/6/79

NOTES:

- 1) IF ATTACHMENT SCREWS ALREADY INSTALLED IN TAILBOOM, REMOVE SCREWS AND VERIFY CORRECT LENGTH PER DRAWING ABOVE. TRANSFER DRILL 4x $\phi 0.204$ (#6) FROM TAILBOOM TO D3866-043 MOUNT. DEBURR. INSTALL D3866-043 TAILBOOM MOUNT USING MS27039-1-11 INTO EXISTING ANCHOR NUTS.
- 2) IF ATTACHMENT SCREWS NOT INSTALLED, DRILL OFF RIVETS ON TAILBOOM AT CORRESPONDING LOCATIONS AND REMOVE. REAM HOLES TO $\phi 0.204$ (#6). TRANSFER DRILL 4x $\phi 0.204$ (#6) FROM TAILBOOM TO D3866-043 MOUNT. DEBURR. INSTALL D3866-043 MOUNT USING MS27039-1-11 SCREWS, NAS1149D0332J WASHERS AND MS21042L3 NUTS.
- 3) TRANSFER DRILL LOWER HOLES TO INSIDE DOOR SILL AND REAM INSIDE DOOR SILL TO $\phi 0.50$ TO PROVIDE ACCESS FOR NUTS AND WASHERS. SEE VIEW D-D.

DESIGN		DART AEROSPACE LTD	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. A
MFG APPR.		D412-786-1	SHEET 4 OF 5
APPROVED		TITLE	SCALE
DE APPR.		HARDPOINT KIT INSTALL	NTS
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